

REMARKS

As set forth above, claims 1-8, 10-19, 21-22, 28, and 30-35 have been cancelled, claims 20, 23-27, 29, 36, and 39 have been amended, and new claims 43-72 have been added. Thus, upon entry of this amendment, the pending claims will be 20, 23-27, 29 and 36-72. To cover the cost of 3 additional claims beyond 20 (at \$18 apiece), the Office is hereby authorized to charge Applicant's deposit account no. 19-0134 in the amount of \$54. Entry of the instant amendment is respectfully requested.

Election/Restriction

Claims 4 and 30 were withdrawn from further consideration pursuant to 37 CFR 1.142(b), and have now been cancelled. The remaining claims have been amended to recite the elected invention, a modified EGFR family member.

Drawings

The drawings were objected to by the Draftsperson in the last Office Action. Applicant accordingly submits herewith corrected formal drawings, which address the Draftsperson's concerns. Withdrawal of this objection is respectfully requested.

Claim Objections

Claims 1, 16, 20, and 27 were objected to for reading on non-elected subject matter. Claims 1 and 16 have been cancelled, rendering this rejection moot as to these claims. As noted above, the remaining claims have been amended to recite the elected invention, a modified EGFR family member. Withdrawal of this objection is therefore respectfully requested.

The Examiner alleged that claims 8 and 20 were substantially duplicative. Applicant respectfully disagrees and submits that these claims differed in scope, for example because claim 20 recited retroviral transduction in step (a) whereas claim 8 did not. In any event, claim 8 has now been cancelled, rendering this objection moot.

Specification

The sequence listing on pages 41-50 has been deleted pursuant to the Examiner's suggestion.

Applicant has amended the description of Figures 1A and 1B on page 4 so that the description better conforms with the figure. Support for the amendment can be found in the text located at the bottom of originally filed Figure 1, which has been removed in the corrected figure.

The Claims

Claims 15 and 19 were rejected under 35 U.S.C. § 112, first paragraph, because of the recitation of the phrase "heterologous gene." The Examiner suggested changing "heterologous gene" to "coding region." Applicant appreciates the suggestion and has used the phrase "coding sequence" in the new claims. Withdrawal of this rejection is therefore respectfully requested.

Claims 20-26, 28, and 36-38 were rejected under 35 U.S.C. § 112, second paragraph. The Examiner pointed out that claim 20 recited steps d) through f). Applicant notes that this was the case with the "marked-up" version of claim 20 submitted in the Appendix of Applicant's previous amendment, but that the clean version of claim 20 on page 4 of the amendment correctly recited steps a) through c). Evidently, the recitation of steps d) through f) in the marked-up version was caused by an autoformatting error. Applicant appreciates the Examiner pointing this out and has taken care to draft the new claims with the proper designation of steps. As for claim 28, Applicant assumes that the Examiner meant to reject claim 29 instead of claim 28. Applicant has amended claim 29 so that it conforms with claim 27. Withdrawal of this rejection is therefore respectfully requested.

Claims 1-3, 6, 7, 10, 11, 16-18, and 33 were rejected under 35 U.S.C. § 102(b) as being anticipated by Vogelstein *et al.* (WO 91/03489 A1). Furthermore, claims 1-3, 6-8, 10, 11, 16-18, 20, 22, 25, 26, 33, and 37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vogelstein *et al.* Applicant respectfully traverses and submits that this reference does not teach or suggest Applicant's invention. Nevertheless, in the interest of advancing prosecution, the

claims have been amended to recite subject matter that the Examiner has indicated is patentable over the prior art. Applicant expressly reserves the right to more extensively address these rejections in a continuing application. Withdrawal of these rejections is therefore respectfully requested.

Claims 1-3, 5, 6, 8, 10, 15-17, 19, 20, 22, 27-29, 33, 36, and 39 were rejected under 35 U.S.C. § 102(b) as being anticipated by Kashles *et al.* (Mol. Cell. Biol. (1991) 11: 1454-1463). Applicant respectfully traverses and submits that this reference does not teach or suggest Applicant's invention. Nevertheless, in the interest of advancing prosecution, the claims have been amended to recite subject matter that the Examiner has indicated is patentable over the prior art. Applicant expressly reserves the right to more extensively address this rejection in a continuing application. Withdrawal of this rejection is therefore respectfully requested.

Claims 1-3, 5-8, 10, 11, 15-20, 22, 23, 27-29, 33, 36, and 39 were rejected under 35 U.S.C. § 102(e) as being anticipated by Chen *et al.* (US Pat. No. 6,235,729). Applicant respectfully traverses and submits that this reference does not teach or suggest Applicant's invention. Nevertheless, in the interest of advancing prosecution, the claims have been amended to recite subject matter that the Examiner has indicated is patentable over the prior art. Applicant expressly reserves the right to more extensively address this rejection in a continuing application. Withdrawal of this rejection is therefore respectfully requested.

The Examiner indicated that claims 12-14, 31, 32, 34, 35, 40, and 41 would be allowable if rewritten in independent form. The Examiner also indicated that claim 42 is allowed. Applicant appreciates the Examiner's favorable assessment of these claims.

Independent claim 20 has been amended to recite a method for identifying transduced mammalian hematopoietic cells, thereby reciting subject matter taken from claim 13, which the Examiner has indicated would be allowable if rewritten in independent form. Applicant therefore respectfully submits that amended claim 20, and all claims depending therefrom (23-26 and 36-38), are in condition for allowance.

Independent claim 27 has been amended to recite a method of identifying mammalian hematopoietic cells expressing a protein of interest, thereby reciting subject matter taken from claim 13, which the Examiner has indicated would be allowable if rewritten in independent form. Applicant therefore respectfully submits that amended claim 27, and all claims depending therefrom (29 and 39-41), are in condition for allowance.

As noted above, the Examiner indicated that claim 42 is allowed. New claims 43-51 depend either directly or indirectly from claim 42 and recite subject matter formerly set forth in various cancelled claims. Applicant therefore respectfully submits that the new claims depending from allowed claim 42 are also in condition for allowance.

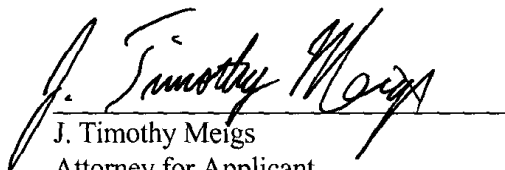
New independent claim 52 re-presents subject matter originally found in dependent claim 12, which the Examiner has indicated would be allowable if rewritten in independent form. In particular, new claim 52 recites a method of identifying a genetically modified cell, wherein the cell is a human hematopoietic cell, a human liver cell, a human endothelial cell, or a human smooth muscle cell. New claim 52 also recites the elected invention, a modified EGFR family member. New claims 53-62 depend either directly or indirectly from claim 52 and recite subject matter formerly set forth in various cancelled claims. Applicant therefore respectfully submits that new independent claim 52 and all claims depending therefrom are in condition for allowance.

New independent claim 63 re-presents subject matter originally found in dependent claim 24. Claim 24 was not rejected on prior art grounds, but only under 35 U.S.C. § 112, second paragraph, because of the above-discussed "steps d) through f)" problem with claim 20, from which claim 24 depends. In particular, new claim 63 recites a method for identifying transduced mammalian cells comprising transducing mammalian cells with a lentiviral vector New claim 63 also recites the elected invention, a modified EGFR family member. New claims 64-72 depend either directly or indirectly from claim 63 and recite subject matter formerly set forth in various cancelled claims. Applicant therefore respectfully submits that new independent claim 63 and all claims depending therefrom are in condition for allowance.

Conclusion

No new matter has been added. In view of the above amendments and remarks, it is submitted that this application is now ready for allowance. Early notice to this effect is solicited. If in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

A handwritten signature in cursive script, reading "J. Timothy Meigs", is written over a horizontal line.

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